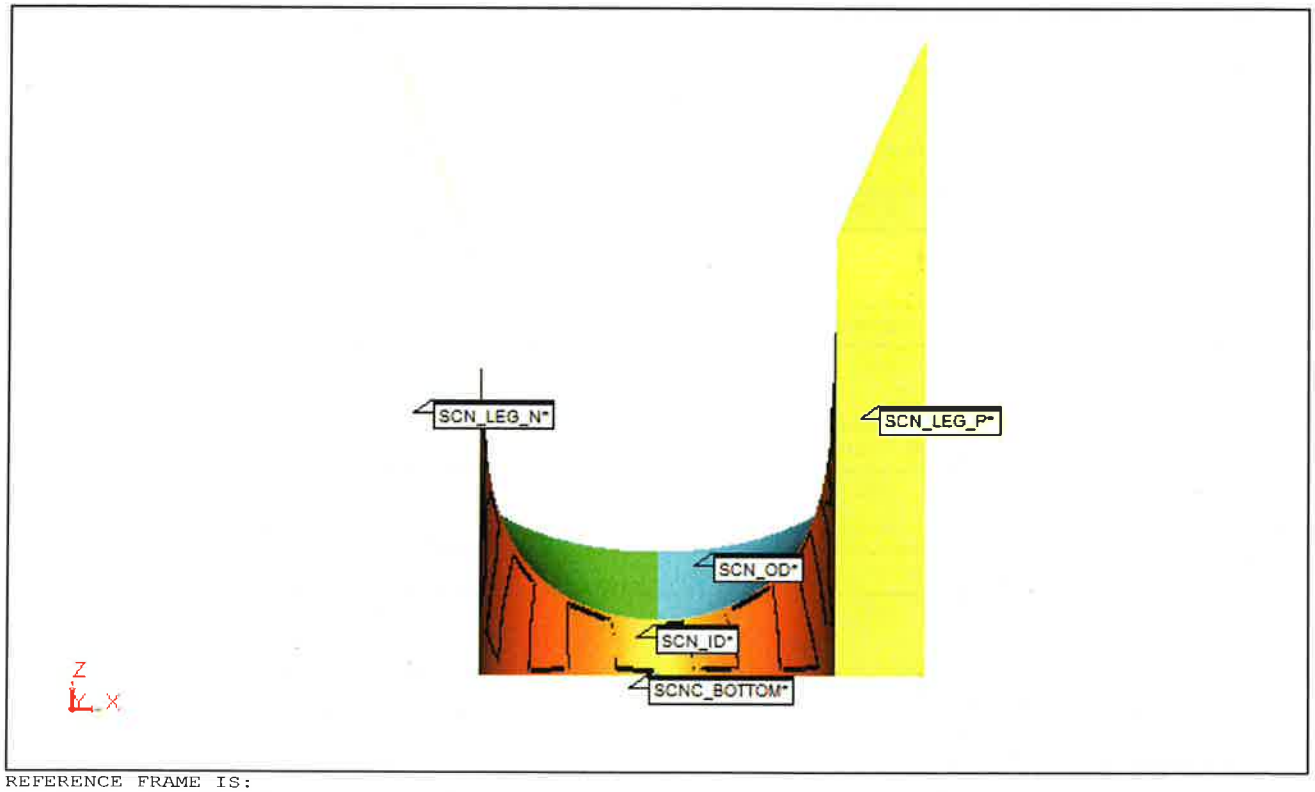
pc-dmis	PART NAME : PN483629-B-V1-IR		June 19, 2012	15:47
	REV NUMBER :	SER NUMBER :	STATS COUNT :	1

483629-B
LHC 11-TESLA DIPOLE
COIL ASSEMBLY
SADDLE LEAD-END INNER

'Inspected by ' : Robert Riley
'Sample Number' : RF none-C03
' ' : 1206191522



REFERENCE FRAME IS:
No Level...use machine level
Rotate -Z- around front of vice
-X- & -Y- set to I.D.
-Z- set to top of parallel

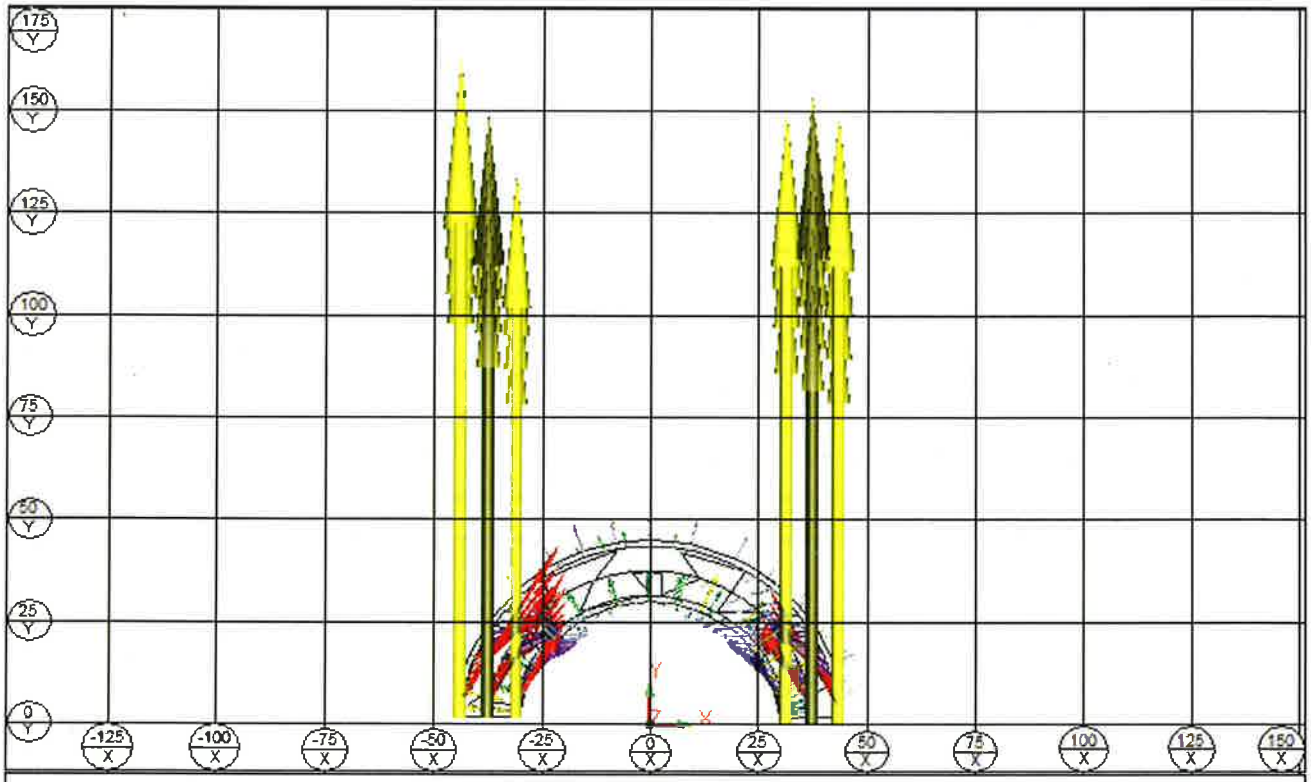
⌖	MM	LOC1 - CYLC_ID				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.014	0.014	0.130	0.130	0.000
Y	0.000	0.025	0.025	0.130	0.130	0.000
R	30.000	30.079	0.079	0.065	0.065	0.014
RN	0.000	0.099	0.099	0.130	0.000	0.000

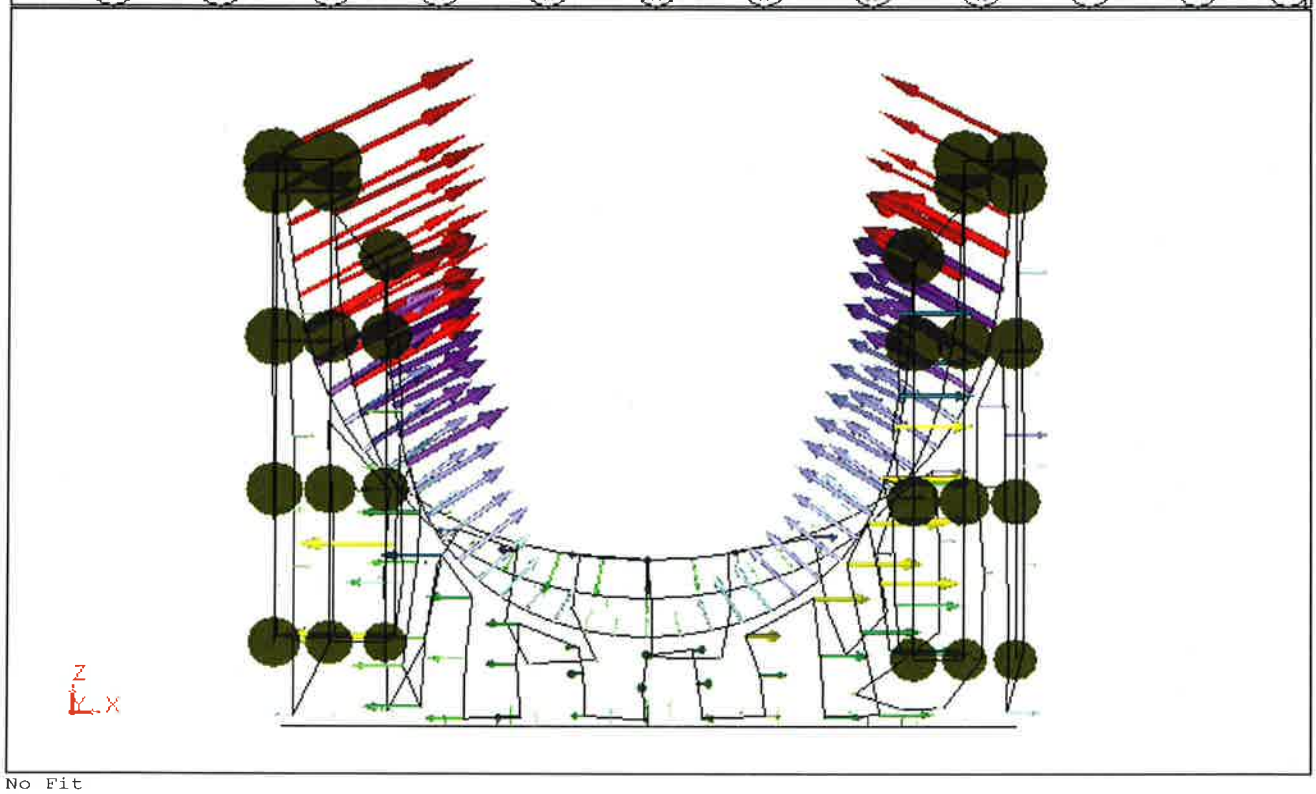
⌖	MM	LOC2 - CYLC_OD				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.031	0.031	0.130	0.130	0.000
Y	0.000	0.113	0.113	0.130	0.130	0.000
R	45.047	45.012	-0.035	0.065	0.065	0.000
RN	0.000	0.125	0.125	0.130	0.000	0.000

⊕	MM	LOC3 - PLNC_BOT					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Z	-321.110	-321.094	0.016	0.130	0.130	0.000	
FL	0.000	0.035	0.035	0.130	0.000	0.000	
⊕	MM	LOC4 - PLNC_LEG_P					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	0.127	1.456	1.329	0.130	0.130	1.199	
S	0.000	-1.329	-1.329	0.130	0.130	-1.199	
FL	0.000	0.026	0.026	0.130	0.000	0.000	
⊕	MM	LOC5 - PLNC_LEG_N					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	1.732	3.074	1.342	0.130	0.130	1.212	
S	0.000	-1.342	-1.342	0.130	0.130	-1.212	
FL	0.000	0.045	0.045	0.130	0.000	0.000	

PROFILES

⌓	MM	PROF1 - SCNC_INNER FORMANDLOCATION					
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL	
M	0.524	0.455	-0.070	0.200	0.200	0.255	
⌓	MM	PROF2 - SCNC_BOTTOM FORMANDLOCATION					
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL	
M	-0.037	0.000	-0.037	0.100	0.100	0.000	
⌓	MM	PROF3 - SCN_ID FORMANDLOCATION					
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL	
M	-0.140	-0.027	-0.140	0.100	0.100	-0.040	
⌓	MM	PROF4 - SCN_OD FORMANDLOCATION					
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL	
M	0.178	0.069	-0.109	0.100	0.100	0.009	
⌓	MM	PROF5 - SCN_LEG_P FORMANDLOCATION					
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL	
M	-1.542	-1.048	-1.542	0.100	0.100	-1.442	
⌓	MM	PROF6 - SCN_LEG_N FORMANDLOCATION					
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL	
M	-1.614	-1.020	-1.614	0.100	0.100	-1.514	





No Fit
x100
See PROF1<->PROF6

	MM	PROF7 - SCNC_INNER FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	0.150	0.068	-0.082	0.200	0.200	0.000

	MM	PROF8 - SCNC_BOTTOM FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	0.263	0.263	0.005	0.100	0.100	0.163

	MM	PROF9 - SCN_ID FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	0.253	0.093	-0.160	0.100	0.100	0.060

	MM	PROF10 - SCN_OD FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	0.367	0.105	-0.262	0.100	0.100	0.167

	MM	PROF11 - SCN_LEG_P FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	-1.338	-1.187	-1.338	0.100	0.100	-1.238

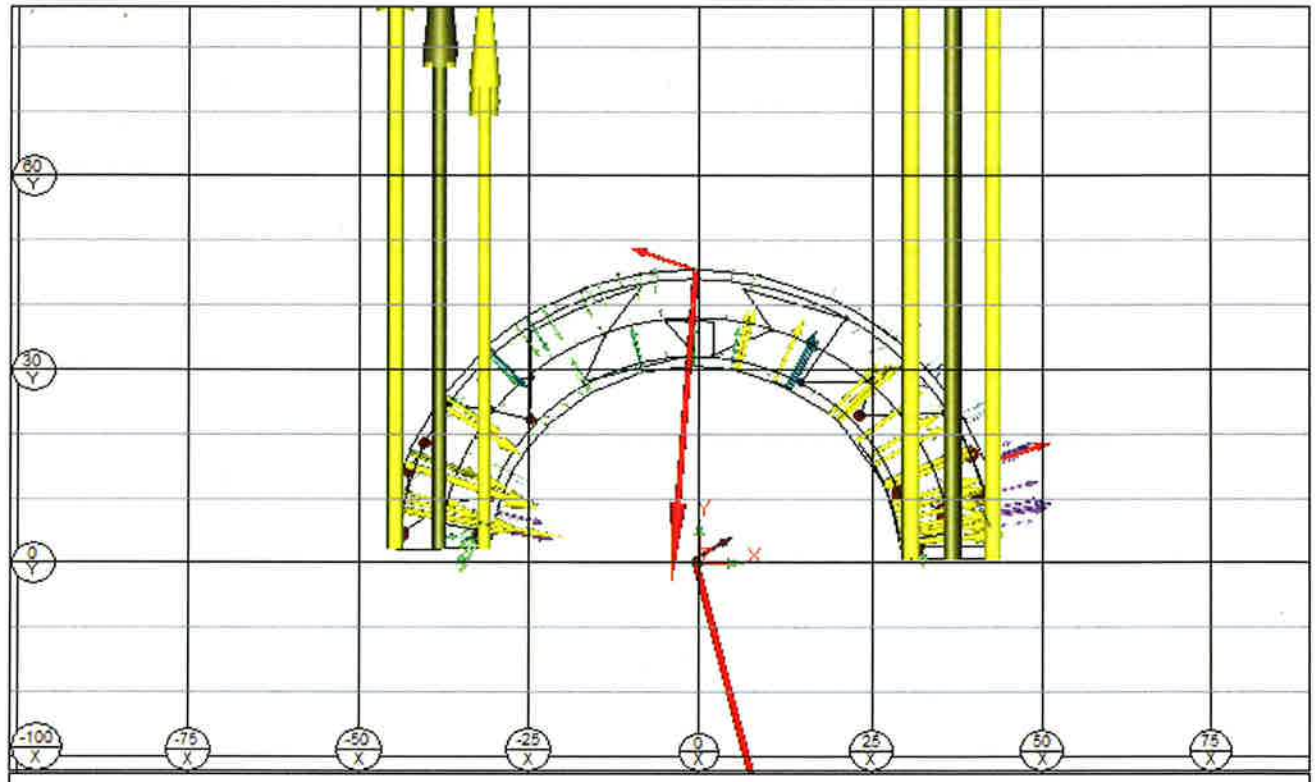
	MM	PROF12 - SCN_LEG_N FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	-1.134	-0.895	-1.134	0.100	0.100	-1.034

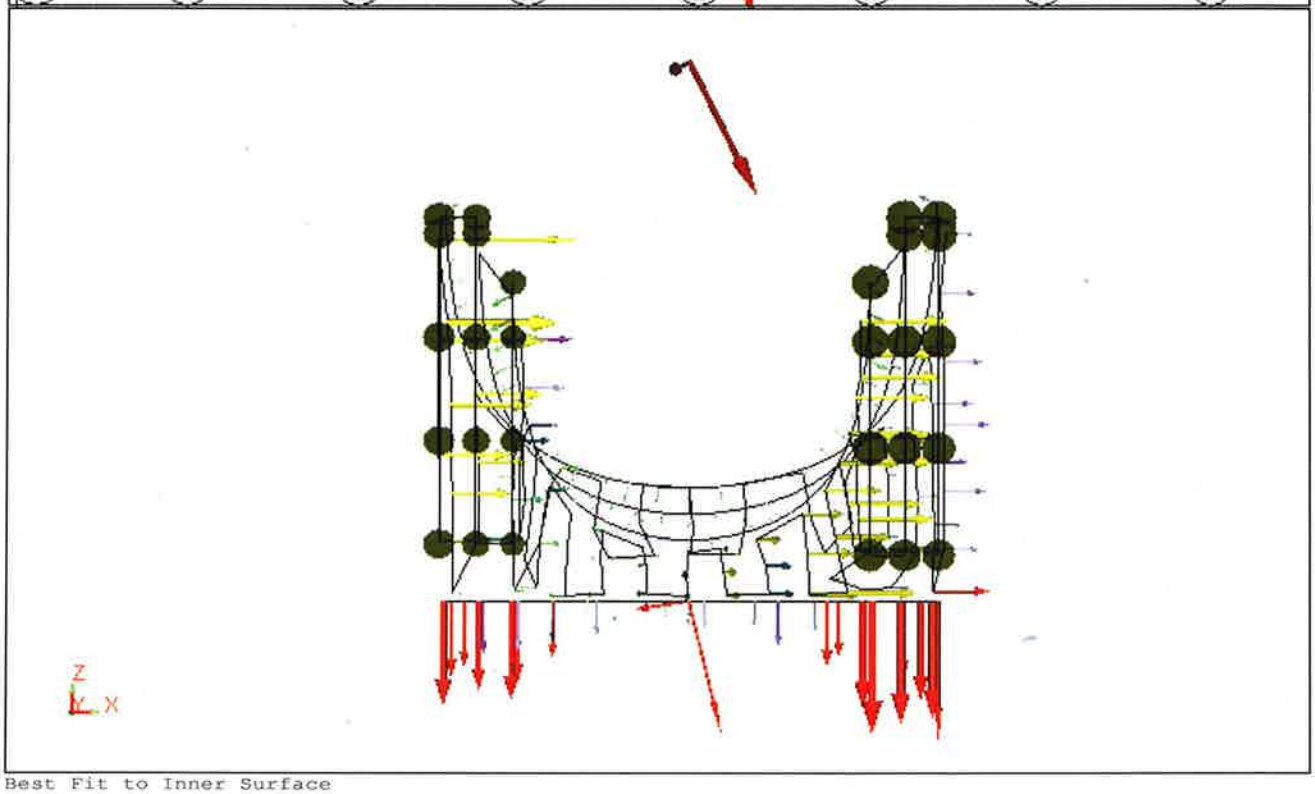
	MM	LOC8 - R1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	0.000	0.058	0.058				
Y	0.000	0.035	0.035				
Z	-321.110	-321.357	-0.247				
TP	RFS		0.256	0.100		0.156	0.000

	MM	LOC9 - R2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	0.000	-0.095	-0.095				
Y	45.000	45.034	0.034				
Z	-321.110	-321.126	-0.016				
TP	RFS		0.102	0.100		0.002	0.000

	MM	LOC10 - R3					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	0.000	-0.034	-0.034				
Y	45.000	44.520	-0.480				
Z	-221.110	-221.127	-0.017				
TP	RFS		0.482	0.100		0.382	0.000

	MM	LOC11 - R4					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	0.000	0.119	0.119				
Y	0.000	-0.480	-0.480				
Z	-221.110	-221.359	-0.249				
TP	RFS		0.553	0.100		0.453	0.000





Best Fit to Inner Surface
x100
See PROF7<->PROF12

	MM	PROF13 - SCNC_INNER FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	0.415	0.378	-0.037	0.200	0.200	0.178

	MM	PROF14 - SCNC_BOTTOM FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	-0.047	-0.008	-0.047	0.100	0.100	0.000

	MM	PROF15 - SCN_ID FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	0.163	0.014	-0.149	0.100	0.100	0.049

	MM	PROF16 - SCN_OD FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	0.123	0.022	-0.101	0.100	0.100	0.001

	MM	PROF17 - SCN_LEG_P FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	-1.497	-1.013	-1.497	0.100	0.100	-1.397

FEATURE	HITS	MEAS X	Y	Z	VECTOR I	J	K	DEV	
SCN_LEG_P	1	43.485	1.140	-312.649	-0.000	-1.000	-0.000	-1.013	MAX
	2	43.483	1.282	-292.788	-0.000	-1.000	-0.000	-1.155	
	3	43.482	1.419	-272.927	-0.000	-1.000	-0.000	-1.292	
	4	43.480	1.559	-253.067	-0.000	-1.000	-0.000	-1.432	
	5	43.480	1.575	-249.990	-0.000	-1.000	-0.000	-1.448	
	6	37.480	1.624	-249.990	-0.000	-1.000	-0.000	-1.497	MIN
	7	37.480	1.596	-253.067	-0.000	-1.000	-0.000	-1.469	
	8	37.482	1.445	-272.928	-0.000	-1.000	-0.000	-1.318	
	9	37.483	1.312	-292.789	-0.000	-1.000	-0.000	-1.185	
	10	37.485	1.175	-312.649	-0.000	-1.000	-0.000	-1.048	
	11	31.485	1.229	-312.650	-0.000	-1.000	-0.000	-1.102	
	12	31.483	1.375	-292.789	-0.000	-1.000	-0.000	-1.248	
	13	31.482	1.502	-272.928	-0.000	-1.000	-0.000	-1.375	
	14	31.481	1.575	-261.991	-0.000	-1.000	-0.000	-1.448	

	MM	PROF18 - SCN_LEG_N FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	-1.534	-0.952	-1.534	0.100	0.100	-1.434

FEATURE	HITS	MEAS X	Y	Z	VECTOR I	J	K	DEV	
SCN_LEG_N	1	-44.016	2.940	-310.564	-0.000	-1.000	0.000	-1.208	
	2	-44.017	3.038	-291.360	-0.000	-1.000	0.000	-1.306	
	3	-44.019	3.147	-272.156	-0.000	-1.000	0.000	-1.415	
	4	-44.021	3.246	-252.953	-0.000	-1.000	0.000	-1.514	
	5	-44.021	3.266	-249.997	-0.000	-1.000	0.000	-1.534	MIN
	6	-37.521	3.131	-249.996	-0.000	-1.000	0.000	-1.399	
	7	-37.521	3.128	-252.952	-0.000	-1.000	0.000	-1.396	
	8	-37.519	3.021	-272.156	-0.000	-1.000	0.000	-1.289	
	9	-37.517	2.911	-291.360	-0.000	-1.000	0.000	-1.179	
	10	-37.516	2.802	-310.563	-0.000	-1.000	0.000	-1.070	

11	-31.016	2.684	-310.563	-0.000	-1.000	0.000	-0.952	MAX
12	-31.017	2.797	-291.359	-0.000	-1.000	0.000	-1.065	
13	-31.019	2.903	-272.155	-0.000	-1.000	0.000	-1.171	
14	-31.020	2.991	-261.996	-0.000	-1.000	0.000	-1.259	

MM | LOC14 - PLNC_LEG_P

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.127	1.415	1.288	0.130	0.130	1.158
S	0.000	-1.288	-1.288	0.130	0.130	-1.158
FL	0.000	0.026	0.026	0.130	0.000	0.000

MM | LOC15 - PLNC_LEG_N

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	1.732	3.000	1.268	0.130	0.130	1.138
S	0.000	-1.268	-1.268	0.130	0.130	-1.138
FL	0.000	0.045	0.045	0.130	0.000	0.000

MM | LOC8 - R1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	0.000	-0.014	-0.014				
Y	0.000	-0.053	-0.053				
Z	-321.110	-321.104	0.006				
TP	RFS		0.056	0.100		0.000	0.000

MM | LOC9 - R2

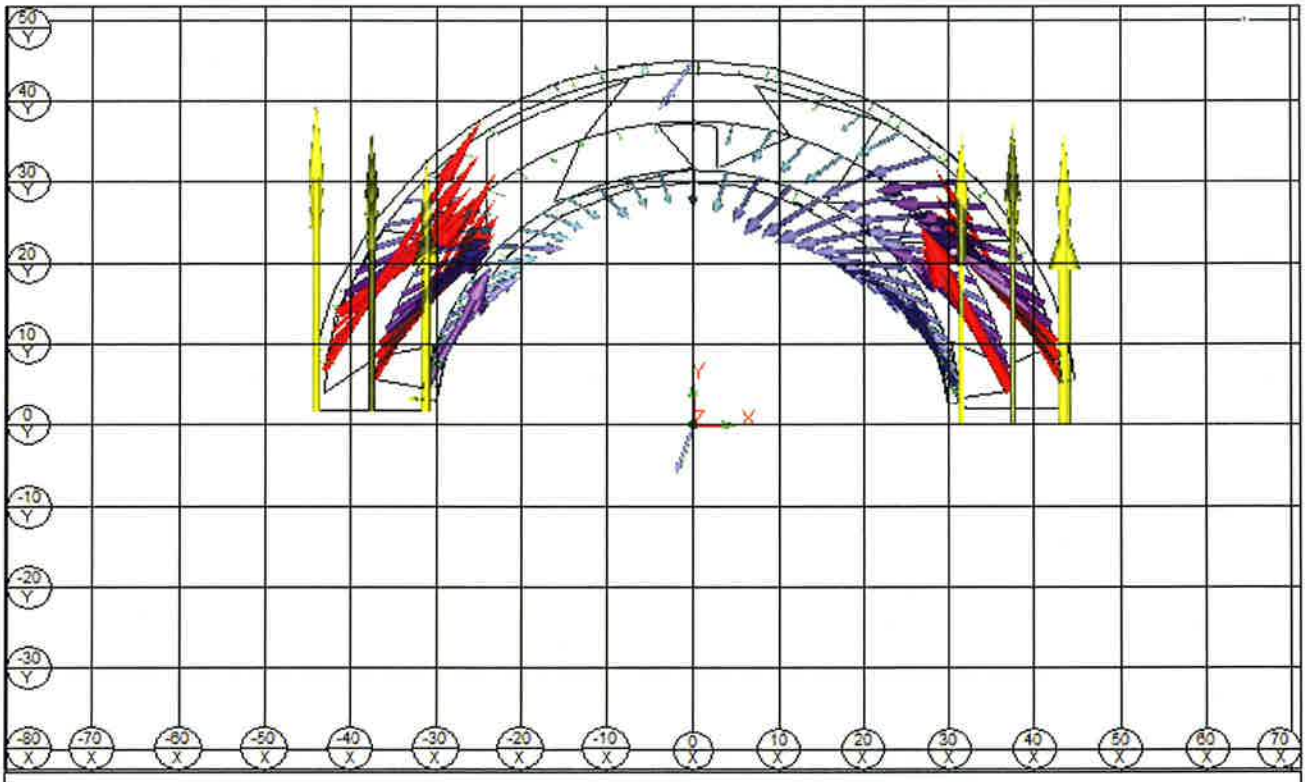
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	0.000	-0.033	-0.033				
Y	45.000	44.947	-0.053				
Z	-321.110	-321.099	0.011				
TP	RFS		0.064	0.100		0.000	0.000

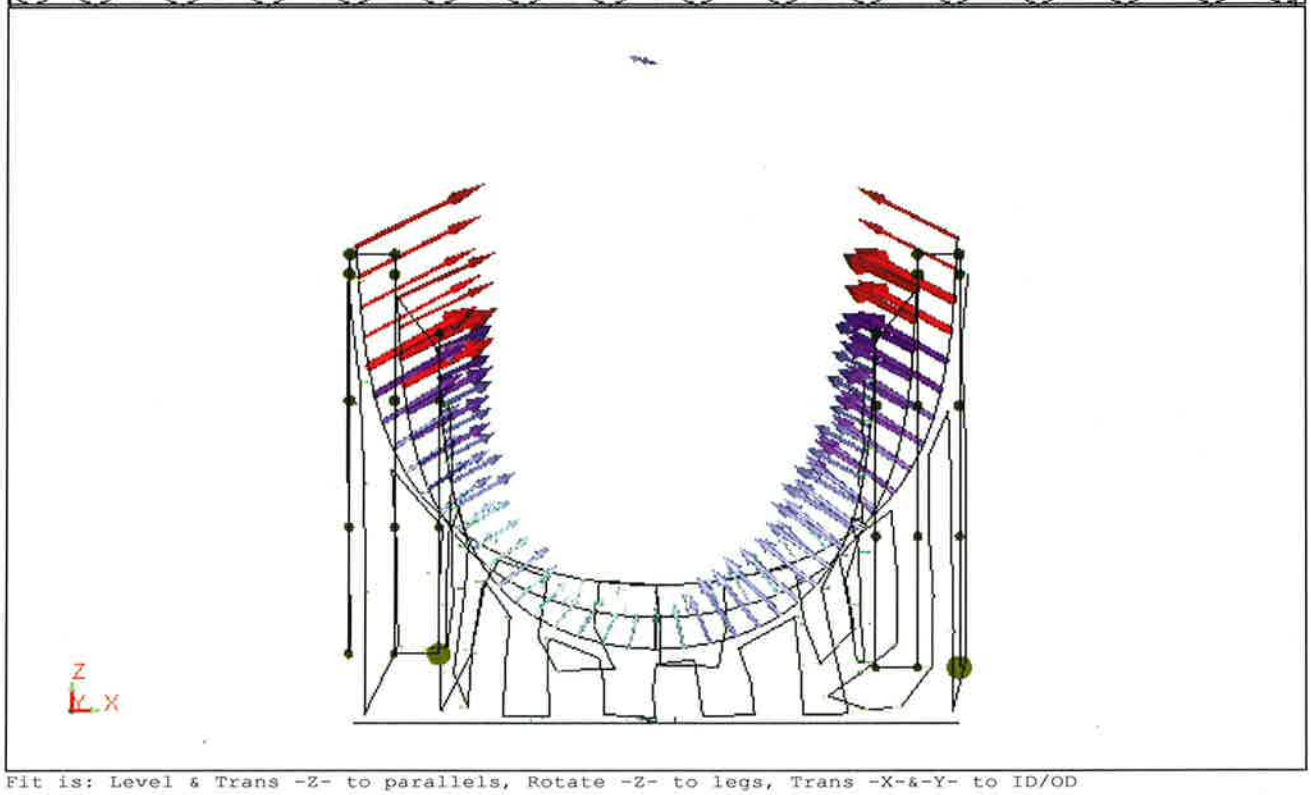
MM | LOC10 - R3

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	0.000	-0.041	-0.041				
Y	45.000	44.936	-0.064				
Z	-221.110	-221.099	0.011				
TP	RFS		0.077	0.100		0.000	0.000

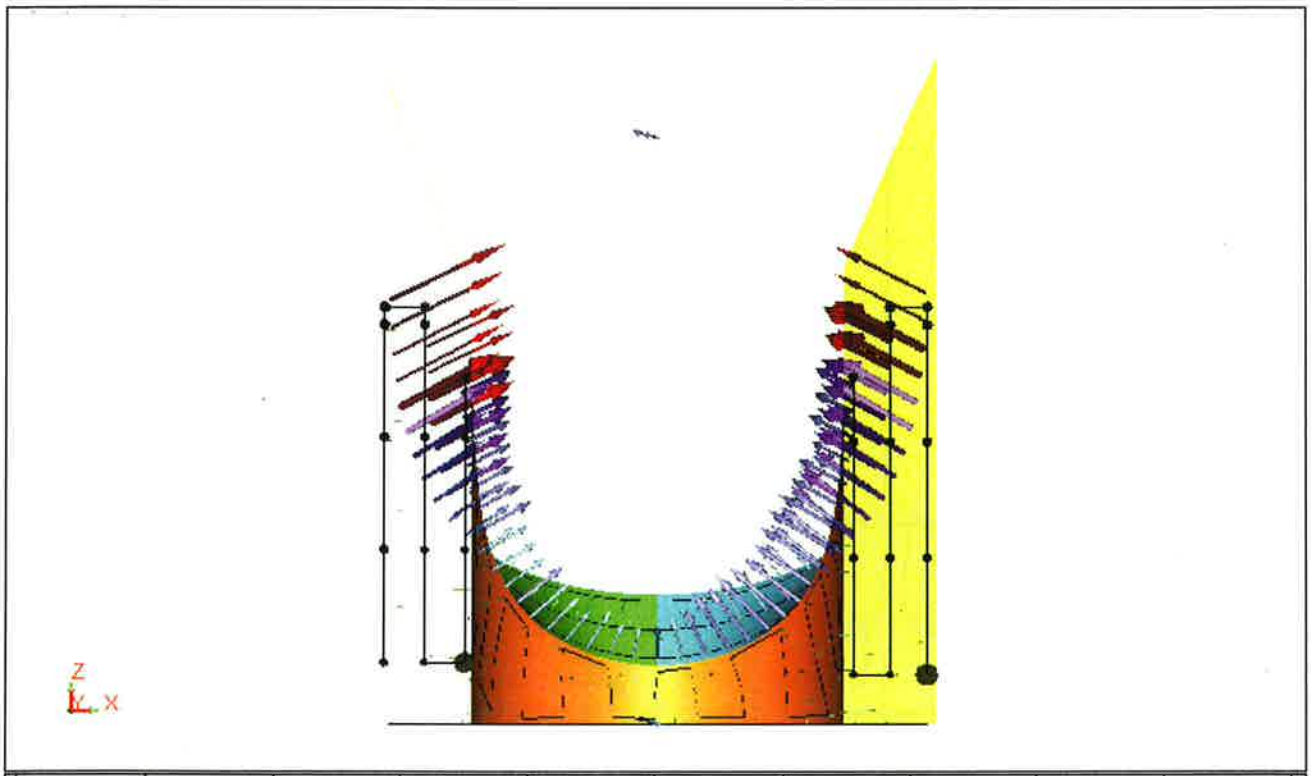
MM | LOC11 - R4

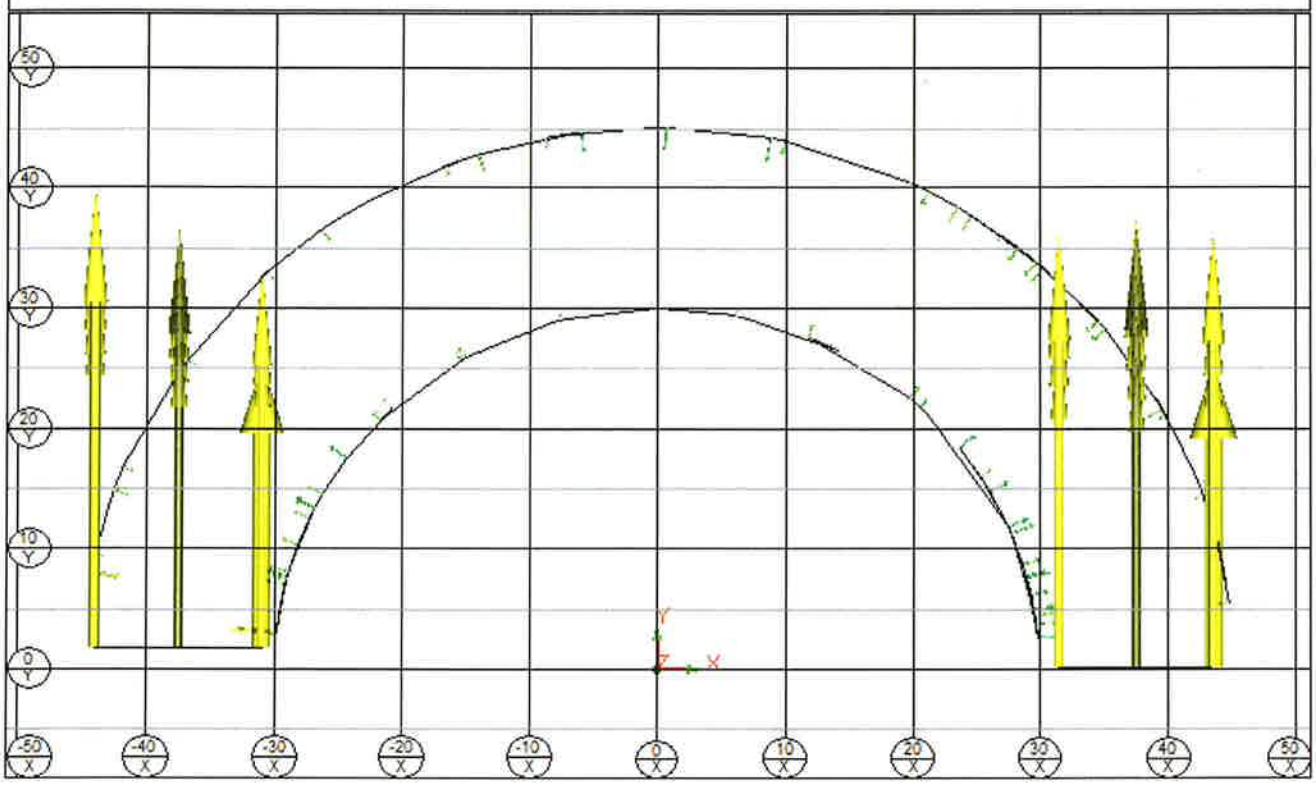
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	0.000	-0.022	-0.022				
Y	0.000	-0.064	-0.064				
Z	-221.110	-221.104	0.006				
TP	RFS		0.068	0.100		0.000	0.000





Fit is: Level & Trans -Z- to parallels, Rotate -Z- to legs, Trans -X-&-Y- to ID/OD
x100 Legs x25
See PROF13<->PROF18


Z
X


50 Y
40 Y
30 Y
20 Y
10 Y
0 Y
-50 X
-40 X
-30 X
-20 X
-10 X
0 X
10 X
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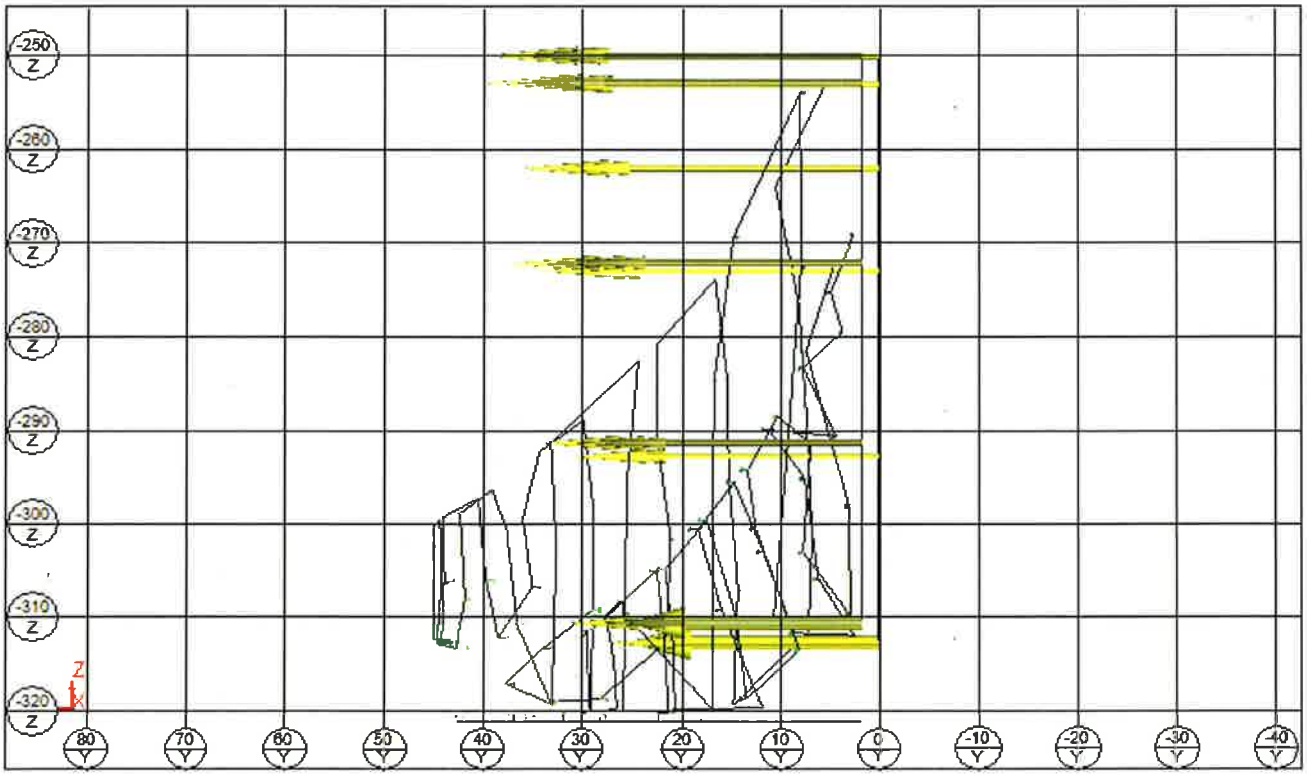
30 X
40 X
50 X
Y
Z
X


-250 Z
-260 Z
-270 Z
-280 Z
-290 Z
-300 Z
-310 Z
-320 Z
Z
X
80 Y
70 Y
60 Y
50 Y
40 Y
30 Y
20 Y
10 Y
0 Y
-10 Y
-20 Y
-30 Y
-40 Y